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## PATENT ABSTRACTS OF JAPAN

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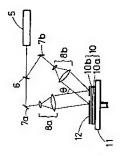
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## (54) MANUFACTURE FOR MASTER DISC FOR PREPARING OPTICAL INTERFERENCE TYPE GUIDE GROOVE OF OPTICAL DISC

## (57)Abstract:

PURPOSE: To form an optical interference type guide groove with high precision and excellent accuracy, by irradiating two-luminous-flux laser light on a photo resist layer formed on a base, recording interference fringes and developing the recording.

CONSTITUTION: A photo resist master disc 10 is formed by forming a photo resist 10b on a glass base 10a. A laser light from a light source 5 is split into two luminous fluxes at a half mirror 6, the two luminous fluxes are made divergent by using mirrors 7a, 7b and lens systems 8a, 8b, the two fluxes are irradiated to the photo resist 10b with a cross angle  $\theta$  to record concentric interference fringes. Through the specified development, unevenness in response to the strength of light of the



interference fringes can be formed. In case of the irradiation, the master disc 10 is fixed on a rotary stand 11, a mask 12 having a slit shaped window is fixed along the radial direction and the rotary stand 11 is rotated.